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UNITED STATES PATENT AND TRADEMARK OFFICE

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/529,304	04/12/2000	YOSHIMI ISU	1163-270P	6441

2292 7590 10/17/2003		EXAMINER	
BIRCH STEWART KOLASCH & BIRCH PO BOX 747 FALLS CHURCH, VA 22040-0747		VO, TUNG T	
		ART UNIT	PAPER NUMBER
		2613	2 0

DATE MAILED: 10/17/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

PTO-90C (Rev. 10/03)

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>03</u> MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on <u>21 July 2003</u> .

2a)☒ This action is **FINAL.** 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1 and 4-17* is/are pending in the application.

    4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1 and 4-17* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

11)☐ The proposed drawing correction filed on _____ is: a)☐ approved b)☐ disapproved by the Examiner.

    If approved, corrected drawings are required in reply to this Office action.

12)☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

13)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a)☐ All b)☐ Some * c)☐ None of:

      1.☐ Certified copies of the priority documents have been received.

      2.☐ Certified copies of the priority documents have been received in Application No. _____ .

      3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

    * See the attached detailed Office action for a list of the certified copies not received.

14)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).

    a) ☐ The translation of the foreign language provisional application has been received.

15)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

1)☒ Notice of References Cited (PTO-892)   4)☐ Interview Summary (PTO-413) Paper No(s). _____ .

2)☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)   5)☐ Notice of Informal Patent Application (PTO-152)

3)☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) *19* .   6)☐ Other: .

DETAILED ACTION

Claim Objections

1.   A series of singular dependent claims is permissible in which a dependent claim refers to

a preceding claim which, in turn, refers to another preceding claim.

A claim which depends from a dependent claim should not be separated by any claim

which does not also depend from said dependent claim. It should be kept in mind that a

dependent claim may refer to any preceding independent claim. In general, applicant's sequence

will not be changed. See MPEP § 608.01(n).

Claims 4 and 5 should depend on claim 1. Appropriate correction is required.

Claim Rejections - 35 USC § 102

1.   The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the

basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act

of 1999 (AIPA) and the Intellectual Property and High Technology Technical Amendments Act

of 2002 do not apply when the reference is a U.S. patent resulting directly or indirectly from an

international application filed before November 29, 2000. Therefore, the prior art date of the

reference is determined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA

35 U.S.C. 102(e)).

2.   Claims 6-8 are rejected under 35 U.S.C. 102(e) as being anticipated by DOMON

(US2001/0055322 A1).

Re claims 6 and 8, DOMON discloses an image coding apparatus comprising:

coding means (29 of fig. 2) for generating a first coded bit stream by encoding an image

signal in a first coding scheme in accordance with a first predetermined compression

algorithm standard (29 (1) of fig. 2); and

header information multiplexing means (33 of fig. 2) for multiplexing, into the

first coded bit stream, header information, including image coding information in

accordance with a second predetermined compression algorithm standard (29(2) of fig.

2), for ensuring compatibility with a second coded bit stream encoded in a second coding

scheme in accordance with the second predetermined compression algorithm standard

([0046] of page 4).

coded bit stream converting means (35 of fig. 2) for transmitting the first coded

bit stream received from said coding means to decoding means (39 of fig. 2)) to decode a

second coded bit stream coded in a second coding scheme in accordance with a second

predetermined compression algorithm standard ([0047-0049] of pages 4 and 5).

Re claim 7, DOMON further discloses wherein said header information

multiplexing means (33 of fig. 2) multiplexes, as the header information for ensuring the

compatibility, a start code of the second coding scheme, and coding scheme identification information indicative of the first coding scheme (J, 37 of fig. 2).

3.   Claims 6-9 are rejected under 35 U.S.C. 102(e) as being anticipated by Boon (US 2002/0054640 A1)

Re claims 6, 8 and 9, Boon further discloses an image coding apparatus comprising: coding means (120 and 130 of fig. 3) for generating a first coded bit stream by encoding an image signal in a first coding scheme in accordance with a first predetermined compression algorithm standard (120 of fig. 3); and

header information multiplexing means (150 of fig. 3) for multiplexing, into the first coded bit stream, header information, including image coding information in accordance with a second predetermined compression algorithm standard (130 of fig. 3), for ensuring compatibility with a second coded bit stream encoded in a second coding scheme in accordance with the second predetermined compression algorithm standard.

coded bit stream converting means (150a of fig. 3) for transmitting the first coded bit stream received from said coding means to decoding means (170 of fig. 5) to decode a second coded bit stream coded in a second coding scheme in accordance with a second predetermined compression algorithm standard ([0050] through [0057] of page 5); syntax analyzing means (160 of fig. 5, fig. 7b) for inputting a first code bit stream generated a first coding scheme in accordance with a first predetermined compression algorithm standard (120 of fig. 3), and for extracting first header information, including image coding information in

accordance with a second predetermined compression algorithm standard (130 of fig. 3), in the

first coding scheme and image coded data;

header information setting means (fig. 6) for setting and coding second haeder

information in a second coding scheme in response to the first header information decoded by

said decoding means (SID=01, 10, 00; figures 10(a)-10(c));

multiplexing means (150 of fig. 3) for generating a second coded bit

stream by multiplexing image coded data extract by said syntax analyzing means with the

second header information coded by said header information setting means.

Re claim 7, Boon further discloses wherein said header information multiplexing

means (150 of fig. 2) multiplexes, as the header information for ensuring the

compatibility, a start code of the second coding scheme, and coding scheme identification

information indicative of the first coding scheme ([0050] through [0057] of page 5).

Claim Rejections - 35 USC § 103

4.   The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in
> section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are
> such that the subject matter as a whole would have been obvious at the time the invention was made to a person
> having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the
> manner in which the invention was made.

5.   Claims 1, 10, and 16-17 are rejected under 35 U.S.C. 103(a) as being unpatentable over

Boon (US 2002/0054640 A1) in view of Sekiguchi et al. (US 5,764,658).

Re claim 1, 10,and 16, Boon discloses an image decoding apparatus (figs. 5-

10(c)) for decoding a first coded bit stream into which first header information (150a, Ep

of fig. 3) and fig. 10(a)) and image coded data encoded in a first coding scheme are

multiplexed (150 of fig. 3), or for decoding a second coded bit stream into which second

header information (150a, E2 of fig. 3, and fig. 10(b)) and image coded data encoded in a

second coding scheme are multiplexed (150 of fig. 3), said image decoding apparatus

comprising:

coding scheme decision means (SWb, 101b of fig. 5) for making a decision as to

whether a received coded bit stream is the first coded bit stream (Ep of fig. 5) or the

second coded bit stream (E2 of fig. 5) and outputting a coding scheme identifier

accordingly (160 of fig. 5), based on a code (501 of fig. 10 (a)) of a first kind included in

the first header information or a code (601 of fig. 10(b)) of a second kind, different from

the start code of the first kind, included in the second header information on the same

layer as the start of the first kind, the first header information further including first image

coding information and the second header information further including second image

coding information ([0232], [0233], and [0234], page 15; see also fig. 7(b)); SEE ALSO

FIG. 8 OF BOON,

wherein the coding scheme identifier is used to switch between alternative

decoding steps for decoding the image coded data in the first coded bit stream or the

image coded data in the second coded bit stream (Ept for decoder 180, Ek for decoder

170 of fig. 5), SEE ALSO [0059] THROUGH [0071] PAGES 5 AND 5, AND FIGURE

8 OF BOON.

Re claim 17, Boon further discloses wherein the coding scheme

identification information is used to switch between decoding steps (101b, SWb, 160 of

fig. 5) for coefficient data that constitute the image coded data of the first coded bit

stream or the image coded of the second coded bit stream (fig. 7b).

It is noted that Boon teaches the data analyzer for analyzing the header and the SID when

it is 0 or 1, but Boon does not particularly teach a start code detector as claimed.

However, Sekiguchi teaches the header analyzer comprises the start code header (4 and

15 of fig. 6) for detecting the start code of the video bit stream (fig. 3). Therefore, it would have

been obvious to one of ordinary skill in the art to incorporate the teachings the start code detector

(15 of fig. 6) of Sekiguchi into the decoding system of Boon (fig. 5) for the same purpose of

detecting the start code of the coded stream. Doing would reduce a misuse of an error start code

as suggested by Sekiguchi (col. 24, lines 47-48).

6.   Claims 12-14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Boon (US

2002/0054640 A1) as applied to claims 6, 8, and 9, and further in view of Brusewitz (US

6,038,257).

Re claims 12-14, Boon further teaches the coding schemes are MPEP-4 and MPEG-2 but

Boon does not particularly teaches the coding scheme is H.263.

However, Brusewitz teaches any decoder to be able to reconstruct video frames from a

compressed bit-stream, the format of the bit-stream must be known to the decoder .

Standardization is one way to ensure that a bit stream is decoded correctly by different

decoders. It is well known in the art that the digital video compression standards, such as

MPEG-1, MPEG-2, MPEG-4, H.261, and H.263, a compression scheme called hybrid motion-

compensated block-based video coding is employed, so this would suggest the first coding

(compression) scheme is H.263 standard and the second coding (compression) scheme is MEPG-

5 standard as suggested by Brusewitz (col. 4, lines 15-36).

Therefore, taking the combined teachings of Boon and Brusewitz et al. as a whole. It

would have been obvious to one of ordinary skill in the art to implement the coding scheme by

encoder to have H.263 coding (compression) scheme (standard) as suggested by Brusewitz et al

(col. 4, lines 15-26) into the decoders (7 of fig.5) of Boon for the same purpose of accurately

decoding the first coding scheme, H.263, or the second coding scheme MPEG-4 based upon the

first header information or the second header information as claimed. Doing so would allow the

system to improve the display of a high-resolution image through integration with a

corresponding lower resolution video image as suggested by Brusewitz (col. 1, lines 11-14).

7.   Claims 11 and 15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Boon

(US 2002/0054640 A1) in view of Sekiguchi et al. (US 5,764,658) as applied to claims 1 and 10,

and further in view of Brusewitz (US 6,038,257).

Re claims 11 and 15, the combination of Boon Sekiguchi further teaches the coding

schemes are MPEP-4 and MPEG-2 (Boon) but it does not particularly teaches the coding scheme

is H.263.

However, Brusewitz teaches any decoder to be able to reconstruct video frames from a

compressed bit-stream, the format of the bit-stream must be known to the decoder .

Standardization is one way to ensure that a bit stream is decoded correctly by different

decoders. It is well known in the art that the digital video compression standards, such as

MPEG-1, MPEG-2, MPEG-4, H.261, and H.263, a compression scheme called hybrid motion-

compensated block-based video coding is employed, so this would suggest the first coding

(compression) scheme is H.263 standard and the second coding (compression) scheme is MEPG-

5 standard as suggested by Brusewitz (col. 4, lines 15-36).

Therefore, taking the combined teachings of Boon, Sekiguchi, and Brusewitz et al. as a

whole. It would have been obvious to one of ordinary skill in the art to implement the coding

scheme by encoder to have H.263 coding (compression) scheme (standard) as suggested by

Brusewitz et al (col. 4, lines 15-26) into the decoders (7 of fig.5) of the combination of Boon and

Sekiguchi for the same purpose of accurately decoding the first coding scheme, H.263, or the

second coding scheme MPEG-4 based upon the first header information or the second header

information as claimed. Doing so would allow the system to improve the display of a high-

resolution image through integration with a corresponding lower resolution video image as

suggested by Brusewitz (col. 1, lines 11-14).

It is noted that if claims 4 and 5 depend on claim 1, they are rejected for the same reasons

as described in claims 11 and 15.

Conclusion

8.   Applicant's amendment necessitated the new ground(s) of rejection presented in this

Office action. Accordingly, **THIS ACTION IS MADE FINAL.** See MPEP § 706.07(a).

Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE

MONTHS from the mailing date of this action. In the event a first reply is filed within TWO

MONTHS of the mailing date of this final action and the advisory action is not mailed until after

the end of the THREE-MONTH shortened statutory period, then the shortened statutory period

will expire on the date the advisory action is mailed, and any extension fee pursuant to 37

CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event,

however, will the statutory period for reply expire later than SIX MONTHS from the date of this

final action.
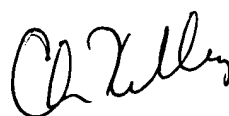
Contact Information

Any inquiry concerning this communication or earlier communications from the

examiner should be directed to Tung T. Vo whose telephone number is (703) 308-5874. The

examiner can normally be reached on 6:30 AM - 3:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's

supervisor, Chris. Kelley can be reached on (703) 305-4856. The fax phone number for the

organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding

should be directed to the receptionist whose telephone number is (703) 305-4700.

Tung T. Vo
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